NLM at MLA | SLA Q&A

Based on questions submitted and live discussion that took place during the NLM Update on May 19, a summary of questions and answers are provided below and grouped by common themes.

Artificial Intelligence (AI)

While there are many benefits of AI, how are we going to handle the negative issues like receiving more and more false article citations of articles that are being released into the publishing marketplace.
You raise a valid concern around AI-generated false information that will be important for us to collectively mitigate in health science and information management. The responsible use of AI technologies, coupled with human expertise, can help strike a balance between leveraging the benefits of AI and mitigating its negative consequences. Please refer to the "Government Input Regarding AI" slide of the NLM Update presentation for resources to guide responsible AI development.

Dr. Brennan mentioned "transparent AI" – can you say more as to what that means to NLM?
According to the National Institute of Standards and Technology (NIST), the AI Risk Management Framework (AI RMF) defines transparency related to AI as "open, comprehensive, accessible, clear and understandable presentation of information or property of a system or process to imply openness and accountability". Simply put, transparency is about "understanding the working logic of the model". At NLM, AI transparency means we aim to communicate activities and decisions to relevant stakeholders in a comprehensive, accessible, and understandable manner for the realization of 'trustworthy AI'.

What companies is the NLM partnering with on its AI applications, if any? If so, are those contractual agreements public? NLM works with a variety of commercial, non-profit and academic organizations to accomplish our mission.

DOCLINE

Now that NNLM has been broadened to include many non-library/librarian stakeholders, how does that affect DOCLINE participation and requests?
DOCLINE participation has not been affected by the expansion of NNLM stakeholders and there has been no change to DOCLINE eligibility guidelines or requesting.

Can non-libraries request items through DOCLINE? Only libraries that are able to participate in resource sharing are allowed to join DOCLINE.

Is there a vetting of participants that would prevent that? I'm thinking about fair use and copyright implications that non-library/librarians might not be apprised of. Yes, we follow these guidelines to determine eligibility: https://www.nlm.nih.gov/docline/doclineguidelines.html.

Does participation in DOCLINE still have a journal minimum?
Libraries must have a minimum of 10 journals to participate in DOCLINE.

General

Will these slides be available after the presentation today?
Yes, the slides and this Q&A are available here and in the original Technical Bulletin.

How is the NLM planning to address the OSTP memo?
NLM will follow the NIH response and guidance on the the OSTP memo. NIH hosted a listening session and issued a request for information in Spring 2023 to solicit feedback from all interested parties. For more information, please see https://sharing.nih.gov/other-sharing-policies/which-policies-apply-to-my-research.

I'm fascinated with NLM's work and how it keeps evolving. For the sake of global health, are there plans or ongoing works at the NLM to collaborate with or support libraries in other countries to ensure appropriate collection and curation of biomedical information?
NLM is a member of professional library organizations such as the European Association for Health Information and Libraries (EAHIL) and International Federation of Library Associations and Institutions (IFLA). NLM supports the Network of African Medical Librarians (NAML), a consortium comprised of former NLM International Associates, and the Association for Health Information and Libraries in Africa (AHILA), on providing training to librarians via several AHILA chapters.

NLM is also currently involved in collaborative global health programs through trans-NIH initiatives (e.g., DS-I Africa) working toward a sustainable biomedical information ecology in Africa to support the mission of NIH and meet the needs of NIH-funded, U.S. and African researchers, clinicians, students, and policymakers. The Library supports the African Journal Partnership Program (AJPP), which partners open access African health and medical journals with mentor journals in the United States and the United Kingdom to promote high editorial standards and visibility. Additionally, NLM supported the development of a 3-year Health Information Specialist (HIS) diploma program in Tanzania, working with the Tanzania Ministry of Health and diverse stakeholders.

NLM's efforts in collaborative global programs also include working with standards organizations and support of open science. Work with standards bodies, such as SNOMED International, ensures interoperability across health information exchange systems. In support of open science and data sharing, we are a part of a global collaboration of organizations that manage nucleotide sequence databases.

MeSH/MEDLINE

I'd like to understand how to provide feedback to improve MeSH and related entry terms.
We appreciate your feedback! The best way to convey feedback directly to the MeSH team is to write to the NLM help desk using the guidelines provided. You can also stay updated on ongoing MeSH changes by checking out the What's New in MeSH page.

What is the process for evaluating automatically generated MeSH terms assigned to an article?
Automated indexing is currently performed by MTIA (MTI-Auto), which is primarily pattern-based – it combines MeSH terms mapped from the title and abstract with MeSH terms appearing in the PubMed related records to produce a filtered, ranked list of MeSH descriptors, supplementary concept records (SCRs), and publication types. NLM staff perform quality assurance review of selected sets of automatically indexed citations, such as those involving genes and proteins, cases of known ambiguity, and clinical trials, and curate these citations as needed. Random sets of citations are also reviewed. For more information, please refer to https://www.nlm.nih.gov/bsd/indexfaq.html#selected.

What is the timeline for human review of automatically indexed articles?
As of April 2022, all journals indexed for MEDLINE are processed by automated indexing, with staff review and curation of results performed as appropriate. Typically, article citations are automatically indexed (auto-indexed) within one day of receipt by NLM's MTIA (MTI-Auto) indexing system and appear as indexed for MEDLINE in PubMed the following day. The timeline for staff review (quality assurance) of auto-indexed citations varies. On average, human review is completed within five days for citations that are selected for review.

Is there any plan to use automated indexing to tag articles with new MESH terms? We talked about the Pima Indians tag yesterday and this seems like an opportunity to use automated indexing to continue updating articles in PubMed.
When new MeSH headings are released, they are currently incorporated into our automated indexing pipeline for assignment to new citations in MEDLINE from that point forward. New MeSH headings are not added retroactively to previously indexed citations. However, when the preferred term for an existing MeSH heading is updated, changing the actual words used to label the concept, those preferred terms are updated on all previously indexed citations. For example, the preferred term for D055964, previously "Alien Hand Syndrome", is now "Alien Limb Phenomenon". Both new and old citations will reflect the new language. Since "Pima People" is a new term for 2023 and not a one-to-one substitution for an existing term, citations prior to 2023 would not reflect the "Pima People" term.